

Mr. Faraday Esq
Royal Institution
By Mr. Ronchetti Albemarle St
London

My dear Sir

I have been requested by the bearer,
Mr. Ronchetti of this town, to give him a few
lines of introduction to you, and though well aware
how much you are occupied, yet I cannot well
refuse, the more especially as he is really a very
deserving person, and one to whose ingenuity and skill
I was much beholden so long as I could work. The
object, I believe, which he has in view, is to estab-
lish a son in London, to be in some way connected
with him here, for the manufacture and sale of
philosoph^l instruments; and it is in connection with
this object, that he is desirous to put a few ques-
tions to you - If you can, without inconvenience,

listen to him for quarters of an hour, you will be
serving a very worthy and industrious man.

I have not yet thanked you for the copy
of your 'Experiments in Electricity'. I was delighted
with them, and hope you will ere long unveil fresh
wonders in that most interesting field of inquiry.
Any paper you may have the goodness to send me,
will reach me thro' Longman's house under cover
to Messrs. Clarke, Booksellers, Manchester.

My son who has lately taken to wife
the daughter of Mr. Allan of Eder (whom I think
you know, or at least by repute as a mineralogist)
unites in kindest regards to you.

Believe me, my dear Sir,

Very sincerely Yrs
J. Henry

Manchester

Dec. 20 1832

I write in great haste and amidst many inter-
ruptions, and can only add that I am, Dear Sir,
very sincerely yours Will. Henry

Dr Henry
6th Decr 1808

Dr Thomson
Edinburgh

Manchester 6 Dec. 1808

My dear Sir

Although at present I am exceedingly
hindered by professional business (which with me is not
very unusual) yet I cannot suffer this parcel to be com-
mitted to the coach, without including a few lines, chiefly
to say that I shall be most thankful for any strict-
ures, which you may have to communicate. Since
I received the copies, I have only had time to make a
very hasty perusal of it, and I cannot answer for
its freedom from more errors of the press than I have
already discovered. Any of these, or thousands of a more
important kind, if such there be, no one is so well
qualified, by a thorough knowledge of the subject, to
discover as you are, and you will greatly oblige me
by freely pointing them out.

For some time past I have been busied in
experiments connected with the improvement of the
manufacture of British salt, and intended to discuss
the cause of the superiority of foreign salt in curing
provisions. My enquiry has already gone so far
as to decide some important facts. These I have
not time even to abridge; but I will send you

The moment it appears, a copy of my paper from the
Phil. Trans. to which I intend to ^{transmit} send it. In the
mean time, you would greatly oblige me by sending by
Hargreaves's wagon from Paris to St. (the carrier is of some
consequence as he is the only careful one) samples of all
the varieties of sea salt manufactured near Edinb. The
specimens should not be less than 4 oz. of each, and
packed in bottles, which Mr. Scott of the South Bridge
will send you, ^{if you apply for them.} At the same time you would confer a
great obligation by sending me about $\frac{1}{2}$ a pint of
the mother liquor of the salt-works, and a short statement
of the particulars of the manufacture, as the rate of
evaporation &c. &c. I cannot sufficiently apologize
for asking of you what I know must be attended
with so much trouble; but I really know no other
person, to whom I could prefer the request. Have
the goodness to advise me by post when the samples
are sent. Mr. Scott will find you a packing case
&c. &c.

Last night I sent up to Mr. Davy
the particulars of a very laborious exp^t. on the decom-
position of ammonia, which I have just completed.
My object was to determine whether or not it be pos-
sible to obtain oxygen gas by the electrization of
the ammonia, when all oxidizable substances are

excluded, except the mercury by which the gas is confined.
~~It~~ Even this might be shut out by a little modification
of the experiment. ~~With~~ With this view, the platinum
wires were encased in glass tubes, which were sealed her-
metically around them, so that all the platinum exposed
to the ammonia was a section of the extremity of each wire.
The ammonia decomposed was 1.94 cub. inch = 362 grains.
The residue of permanent gas was 3.87 cub. inches. By the
most careful eudiometrical trials, Mr. Dalton & I found
that (using nitro^g gas) it contained, at the highest result 2
per cent of oxygen; at the lowest 1.5. The common air
at the outlet was $\frac{1}{2}$ a measure in 100, of the oxygen
therefore 100. The total increase of oxygen was
0.074 cub. inch. The Nitrogen & hydrogen in the residue
were to each other 28.678: 6.55 and the oxygen on
the lowest estimate of $1\frac{1}{2}$ per cent 1.68⁺ to those numbers.
Hence the weights of 100 ammonia are
nitrogen 77.6
hydrogen 17.8
oxygen $\frac{4.6}{100}$

The proportions of hydrogen and nitrogen gases in the unabsorbed
residue, as well as the amount of the expansion, differ a little
from Mr. Davy's determination; but they agree, as nearly as
possible, with the results stated by Berthollet in the
Journ. de Phys. for 1786. The details of my exp^t. will probably
appear in Mr. Davy's next Bakerian Lecture, which will
be read next Thursday evening.

⁺ There was a manifest oxidation of the mercury.

it, that I am deeply sensible of the esteem by which it has been prompted.

Now that your office is vacant, would it not be advisable to require that the future holder of it should not practice medicine. All the sound & force the reasoning of Professor Luffair in the controversy test-

medical practice to be otherwise than in ~~compatibility~~ with daily lectures on any experimental science, and with that devotion of mind and ardent enthusiasm, which a public teacher ought to feel, and to kindle to a considerable degree in his hearers.

Believe me, my dear Sir, with sincere esteem and regard, Your obliged & faithful servant

Manchester 18 August 1817

My dear Sir

It is impossible that I can feel otherwise than highly gratified by your friendly letter which has this morning reached me, and by the flattering suggestion which it contains. To be thought worthy, by yourself and by my other friends at Glasgow, to fulfil the duties of a ~~Station~~ friend, of so much importance and usefulness as the one which has lately become vacant in your university, is of itself a distinction which I little expected, and which, (whatever might have been the result of my becoming a candidate) ~~would have been~~ ^{is} ~~improper~~ ^{improper} me with the most lively sense of obligation. As a

Yours H. 20

William H.

Dr. Brown
Miller Street
Glasgow

1817

making the mathematical chair seems to me to apply with equal weight to a chemical lectureship. In the courses of lectures which I formerly gave, I found employment for my whole time as long as they lasted, and though much may, no doubt, be done to abridge the labour by arrangements similar to those so successfully practised by Dr. Hope, yet I cannot conceive even moderately extensive

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some of emolument, too, the office, (could I have succeeded to the extent of my own wishes in performing its duties) would have been an object of great consequence to me. But though I estimate most highly its value in this way, ^{as well as} ~~also~~ in conferring scientific rank, ^{yet} I am compelled, by a variety of circumstances which for some years to come must bind me to this spot, to forego all intention of proposing myself for a situation, which, in almost every respect, would have been more agreeable to my taste and habits, than the sphere in which I am now moving. For some time past, I have been induced, by habitual delicacy of health, to decline rather to seek an extension of medical practice, and as my family is a pretty large and an increasing one, I have made whenever I have been tolerably well, great exertions to extend my chemical manufacture.

D. H. M.

These exertions have been attended with all the success I could have expected, and from time to time I have been induced to lay out sums of money in buildings & utensils, the aggregate of which is to me of serious moment. I am of opinion, therefore, ^{that} it will be more consistent with my interest and happiness to persevere steadily in the course I am now pursuing, than to yield even to so strong a temptation as that which ^{is} held out. Added to this, the very qualification which unfits me for medical practice, would be a serious bar to my performing the duties of the proposed situation, with that regularity which would be absolutely necessary. Twice within the 4 or 5 last years, I have had attacks of hæmoptysis, slight it is true, but still sufficient to render any situation ineligible, in which public speaking would be a necessary duty. That I may not, therefore, be the means of interfering with the views of any other candidate, I lose no time in declining your very kind and flattering suggestion, and in assuring you and my other friends who have concurred in

I have not omitted to mention the Journal where I thought
it might possibly produce something, but I fear this is a barren
soil. For myself (were I able to do any thing) I believe I must
not desert our friend R. P.

Manchester Feb^y 8th 1831.

My dear Sir

Accept my best thanks for a copy of your second
edition rendered by its enlargement even more valuable
than the original one, of which the chemical world, by its
rapid sale, has declared so favorable and well founded an
opinion. My acknowledgments have been delayed by inability
to use a pen. Soon after quitting London, I was obliged to get
a tumor removed from within the flexor tendon of
one of the left fingers, and had not recovered from this when
I was again dismembered of the right hand by a painful
affection, the issue of which is still uncertain. I am therefore,
as you may suppose, a very helpless and useless person.

Had it not been for this hindrance, I should have been engaged
in one or two sets of experiments, for which I have been long
waiting the conjunction of health and leisure. Of these, the
first in order would have had for their object to determine
whether there is only one or two species of phosph^d Hydrogen

Gas, and collaterally to inquire into the true equivalent of Phosphorus, which you will doubtless agree with me is by no means well made out. But in this Town good manual assistance in the more refined analysis of gaseous bodies is quite unattainable, and I must wait patiently for the removal of this personal disqualification.

Having got your second Edition off your hands, you must permit me to say that I hope you will direct your next exertions to ^{some of} those more elevated topics of chemical Philosophy, to which you have established your title to aspire. In the exercise of your public duties in the Royal Institution, you must necessarily, ^{while} ~~on~~ treading the ground which has been already cleared, sometimes cast your eye beyond its boundaries, and catch glimpses of extensive tracts, on which nothing more than a dawning light is yet shed. It is impossible for any one (even for a person like myself, whose energies of thought and purpose are on the wane) not to be warmed into something like enthusiasm, when fancy pictures the glories that are yet to be won in the fields of chemical Science. These bright though distant prospects will, I trust, tempt you to open and to pursue

paths that may lead you to great discoveries, to the benefit of Science, and to the increase of your own honorable fame.

I was sorry that I could make so little use of your kindly offered hospitalities while I remained in Town. Some business of no very agreeable nature took me daily into the City, and I need not say to a Londoner how incompatible are visits, on the same day, to the eastern and western extremities of your overgrown Metropolis. One evening, however, I did call to have taken tea with you, but found you from home.

I beg my kind regards to Mrs Faraday. Say to her that Mrs Henry and my daughters will cheerfully undertake to find amusement for her on your promised visit, while you and I explore objects that might not interest her.

Believe me my dear Sir

very faithfully yours

W. Henry

My Son desires his best remembrance to you. He is busied in thinking, and preparing to experiment, not on Chemistry, which is forbidden ground to a Physician, but on an interesting subject of Physiology.

W. H.

HENRY'S CHEMISTRY.
In 2 vols. 8vo. 11. 14s. boards, New Edition,
ELEMENTS of EXPERIMENTAL CHEMISTRY. By WM.
HENRY, M.D. F.R.S. &c. The tenth edition, comprehending all the
Recent Discoveries; and illustrated with ten plates by Lowry, and several en-
gravings on wood.—London: printed for Baldwin, Cradock, and Joy, Paternos-
ter-row; and R. Hunter, St. Paul's Church-yard.

Dr William Henry, to whom the science of chemistry generally, and of gaseous chemistry in particular, is under great obligations. He was the author of nine papers in our Transactions, many of them of great merit; and his System of Chemistry is one of the best written and best arranged compendiums of that important and extensive science, which has been published of late years, whether in our own language or in any other. The Memoirs of the Manchester Society are chiefly indebted to him, in conjunction with Dr Dalton, for the high character which they have so long maintained. Dr Henry, like Dr Wollaston, made the results of science, obtained by the most original and difficult researches, the foundation of a splendid fortune, and few persons have contributed more effectually, by their discoveries and exertions to the promotion of those arts and manufactures which form the foundation of the prosperity of a great commercial nation.

(From an address by His Royal Highness the Duke of Sussex,
delivered at the anniversary meeting of the Royal Society.
November 30th 1830.)

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AUTOGRAPHE

de

Henry

William

OBSERVATIONS

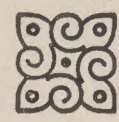
L.a.s. 2 p.4^o, Manchester, 20.12.1832, mit eigh. Adresse an Faraday, warmes Empfehlungsschreiben für Mr. Ronchetti aus Manchester, der einen Sohn in London unterbringen will, dankt F. für seine Sendung des Buches „Experiments in Electricity“ und bittet ihn um weitere Sendungen. / Aus Sammlung Dr. Löwenfeld. /

2.L.a.s. 3 1/4 p.4^o, Manchester, 6.12.1808, mit eigh. Adr. an Dr. Thomson in Edinburgh; spricht über seine grosse berufliche Inanspruchnahme, die es ihm sehr erschwert, die Korrektur der eingesendeten Kopien durchzuführen, behandelt sodann seine Experimente zum Zwecke der Verbesserung d. britischen Salzerzeugung und zur Klarstellung der Ursachen der Ueberlegenheit fsemder Salzarten. Er bittet auch um Uebersendung v. Mustern aller Arten von Seesalz, dasin der Nähe von Edinburgh gewonnen wird und gibt Weisungen über die Expedition derselben. Er sendet an Davy alle Einzelheiten über Versuche, die er angestellt hat um festzustellen, ob man durch Elektrolyse von Ammoniak Sauerstoff erhalten kann. Erwähnt Dalton, bespricht die Uebereinstimmung seiner Resultate mit denen von Berthollet im Journal de Physique 1786 und glaubt, dass die Details seiner Versuche in Davy's nächster Bakervorlesung zum Vortrage gelangen werden.

Henry William.

Sohn der Vorigen. Dr. Med.
u. Besitzer chemischer Fabriken
bei Manchester / Manchest. Mem.
Ser. II., Vol. VI. 1842. /,
geb. 1774, Dec. 12, Manchester
gest. 1836, Sept 2, Pendlebury
b. Manchester.

The elements of experimental chemistry, 2 vol. 8^o, Lond. 1799, 11 th edit 1829. Experiments on carbonated hydrogenous gas, with a view to determine whether carbon be a simple or a compound substance / Phil. Tr. 1797/. Experiments for decomposing the muriatic acid / Ib. 1800/. On the quantity of gases absorbed by water at different temperatures and under different pressures / Ib. 1830/. Descript. of an apparatus for the analysis of the compound inflammable gases by slow combustion etc. / Ib. 1808/. On ammonia and an account of a new method of analysing by



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combustion with oxygen and other
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/ Ib.1810/. Exprm. on the muriatic
and oxymuriatic acids/ Ib.1812/.
On the aeriform compounds of
charcoal and hydrogen etc./Ib.
1821/. On the action of finely
divided platinum on gaseous
mixtures etc./Ib.1824/.

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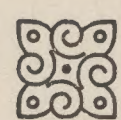
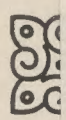
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trage gelangen werden.



HENRY (William, M.D., F.R.S., *chemical writer and manufacturer*, 1774-1836) A.L.S. (W. HENRY),
Manchester 18 August 1817, to 'Dr. Brown, Miller Street, Glasgow,' 4 pages 4to., £1, 10s

Giving his reasons for not applying for the professorship of chemistry of Glasgow University (because he prefers to
develop his chemical manufacture). . . . 'I cannot conceive even moderately extensive medical practice to be otherwise
than incompatible with daily lectures on any experimental science.' . . . **LONDON SO11111111** 52

£1, 10s

... 'I cannot urge you to give us this lecture if you do not feel that you can spare the time, but I can say that
rule the Society has a very select and large audience, a constant attendant being Sir W. Grove and many others of
Royal Society.' ...

5739 — A.L.S. (D. E. HUGHES), 40 Langham Street, Portland Place, W., Oct. 22 1897, to the s